

ABSTRACT

Coated inflatable fabrics, more particularly airbags to which very low add-on amounts of coating have been applied, are provided which exhibit extremely low air permeabilities. The inventive fabrics are primarily for use in automotive restraint cushions which require low permeability characteristics (such as side curtain airbags). Traditionally, heavy, and thus expensive, coatings of compounds such as neoprene, silicones and the like, have been utilized to provide such required low permeability. The inventive fabric utilizes an inexpensive, very thin coating to provide such necessary low permeability levels. Thus, the inventive coated airbag possesses a coating of at most 2.5 ounces per square yard, most preferably about 0.8 ounces per square yard, and exhibits a leak-down time (a measurement of the time required for the entire amount of gas introduced within the airbag at peak pressure during inflation to escape the airbag at 10 psi) of at least 7 seconds. All coatings, in particular elastomeric, non-silicon coatings, and coated airbags, meeting these criteria are intended to reside within the scope of this invention.